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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/680,396

10/07/2003

Adrian Carter

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5974

38731

7590

12/19/2006

NUFERN

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EXAMINER

HOFFMANN, JOHN M

ART UNIT

PAPER NUMBER

1731

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
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3 MONTHS

12/19/2006

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 12/19/2006.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Office Action Summary	Application No. 10/680,396	Applicant(s) CARTER ET AL.	
	Examiner John Hoffmann	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 9-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s) *

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 5-6, 11-12 and 1-2 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Zhang 6192713.

See Example 2 of Zhang – starting in col. 22. Zhang's tube is the elongate glass article. The adhering and (first) forming step are disclosed at least at Table II and col. 21, lines 55-58, and col. 23, lines 1-4 which indicates that the cladding is sintered prior to the adhering step of the different layer (which corresponds to the core layer of table II of Zhang). The exposing step is disclosed at col. 23, lines 40-44. The (second) forming is disclosed at lines 45-46. However, Zhang discloses that the collapsing occurs at the same time of the sintering, so one could argue that "a different portion of the cladding" and/or "a second sintered layer" never exists. Examiner believes that such would be an improperly narrow reading of the claim, there is nothing which would preclude one from

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using the conventional technique of drilling a hole in the preform so as to insert a rod.

This is NOT to be interpreted as an assertion that such would have been obvious or that Zhang teaches such – rather that Examiner believes that applicant intends the claim to not be limited to any of applicant's specific embodiments. And that Zhang's sintering step reads on "a different portion of the cladding" because it is possible to have it function as a cladding. The claim does not require a step of adding a core material and thus Zhang need not teach adding a core material.

Furthermore, even if Examiner interpreted the claim too broadly, Zhang discloses forming the different portion in substantially the same way that applicant does – see Zhang col. 24, lines 55-67. It is clear from col. 26, lines 40-56 that the various Examples are not limiting.

Claim 6 refers to drawing a fiber into a fiber. However, claim 5 does not require making a fiber. The broadest reasonable interpretation is: "If a fiber is formed, then it is drawn into a fiber. Since neither of Example II nor III of Zhang is converted into a fiber, it is deemed that Zhang suggests that the process is useful – such as a method of making an intermediate product – the preform. Thus the Zhang method need not make a fiber.

Claim 11: Zhang's Example 3A reads on the claim. The first deposited glass and sintered glass layer is the "another part". And Zhang's core layer is deemed to be the "first part" – prior to the sintering thereof.

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Claim 1: Zhang performs the process in the following order: the “providing” step, “adhering a different layer”, “refraining”, “forming a different sintered layer”, the first “adhering step”, and finally “forming a first sintered layer by sintering”.

See Interactive Gift Express, Inc. v. Compuserve Inc., 256 F.3d 1323, 1343 (Fed. Cir. 2001) (holding that a method claim not reciting an order of steps is not construed to require one, unless “the method steps implicitly require that they be performed in the order written”). Examiner sees nothing which requires the steps be performed in the order written. Although the terms “first” and “second” could be used to denote sequences, it is well understood that such terms are commonly used in claim construction merely for identification purposes. Examiner could find no basis in the present specification that applicant intended a narrow sequence-only scope to the terms. It would be improper for the Office to (arbitrarily) interpret “first” and “second” narrowly when broader scopes are routinely used in patent claim construction.

In other words: whereas “first” and “second” have a reasonable interpretation which implies a sequence; such is a narrow reasonable interpretation. The terms “first” and “second” as merely identifiers is also a reasonable interpretation and appears to be the “broadest” reasonable interpretation available.

The PTO gives a disputed claim term its broadest reasonable interpretation during patent prosecution. Hyatt, 211 F.3d at 1372. The “broadest reasonable interpretation” rule recognizes that “before a patent is granted the claims are readily amended as part of the examination process.” Burlington Indus. v. Quigg, 822 F.2d 1581, 1583 (Fed. Cir. 1987). Thus, a patent applicant has the opportunity and responsibility to remove any ambiguity in claim term meaning by amending the application. In re Prater, 415 F.2d 1393, 1404-05 (CCPA 1969). Additionally, the broadest reasonable interpretation rule “serves the public interest by reducing the possibility that claims, finally allowed, will be given broader scope than is justified.” In re Am. Acad. of

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Sci. Tech. Ctr., 367 F.3d 1359, 1364 (Fed. Cir. 2004) (quoting In re Yamamoto, 740 F.2d 1569, 1571-72 (Fed. Cir. 1984)).

As to the language that the layer "includes voids". It is inherent that some period prior to complete sintering, that there are voids. The claim does not stipulate when there must be voids, or any specific duration for the existence.

Most importantly, it is inherent that bubbles would exist in the preform. For example, see Partus 5692087, col. 1, lines 24-36; Glodis 6122935 at column 4, lines 18-31, col. 1, line 50 and col. 22-28 suggest that bubbles (although undesirable) are typical – and the language reasonably suggests that merely reducing the number of bubbles is a reasonable desired result (col. 5, line 61 and elsewhere).

From MPEP 2145:

A prior art reference that "teaches away" from the claimed invention is a significant factor to be considered in determining obviousness; however, "the nature of the teaching is highly relevant and must be weighed in substance. A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." In re Gurley, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994) (Claims were directed to an epoxy resin based printed circuit material. A prior art reference disclosed a polyester-imide resin based printed circuit material, and taught that although epoxy resin based materials have acceptable stability and some degree of flexibility, they are inferior to polyester-imide resin based materials. The court held the claims would have been obvious over the prior art because the reference taught epoxy resin based material was useful for applicant's purpose, applicant did not distinguish the claimed epoxy from the prior art epoxy, and applicant asserted no discovery beyond what was known to the art.)

In other words: the existence of bubbles in an the glass layer is conventional and typical and although considered to be undesirable by the prior art, does not result in a patentable invention.

To put it yet another way: Examiner can find nothing claimed, nor even any specific disclosed embodiment which indicates the present invention has any bubble (in

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number or size) that is any different from the bubbles that one typically encounters in typical preform manufacturing methods.

Claims 2 and 12 are clearly met.

Claim 1-6 and 9-12 are rejected under 35 U.S.C. 102(b) as being anticipate by Evans 5925163 (with Kirkbir 5254508 and Eaton 3904422 to show inherency).

See the previous art rejection for how Evans was previously applied. As indicate above, one would reasonably expect to have some voids/bubbles (i.e. at least two) in the preform layers.

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 9-10, 12 and 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang 6192713 in view of Baumgart 4820322.

Zhang discloses the invention as claimed, except for the provision of a second glass article. See example 2 of Zhang. Baumgart discloses that overlapping can increase the productivity of the MCVD process (col. 1, lines 57-65 for instance). It would have been obvious to increase the productivity of the Zhang process by using the Baumgart productivity increasing teachings – i.e. by providing an overlapping tube and overlapping the core preform with it.

Claims 3-4, 12 and 10 are clearly met.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

It is argued that Evans layers are not directed to a cladding, rather to a core. This is not persuasive – any more than a potential infringer could avoid infringement with an exact duplicate method, but refer to the layer as a “core” rather than a “cladding”. In other words, any glass can be considered to be a core, and any glass can be considered to be a cladding. Especially in W-profile fibers – one can call one layer to part of a core, and another person can refer to it as a cladding. Examiner understands that there may be definitions (for core and/or cladding) for which applicant's argument is valid. However there is nothing in the claims or in the present specification which indicates the claims must be interpreted in light of such narrow interpretations. It would be improper for Examiner (or Applicant) to *now* find a definition which corresponds to a scope which would avoid Evans.

It is argued that it is well established that the OVD process includes further sintering or consolidation. Applicant offers passages in Evans and Kirkbir as evidence. Examiner is unconvinced. The passages merely refer to steps that Evans and Kirkbir perform – not a definition /explanation as to what OVD means. OVD is an abbreviation for “outside vapor deposition”. The plain meaning of such is that it is only a “deposition”. Examiner finds no basis for considering a “deposition” to really mean “deposition and consolidation” as suggested by applicant.

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As to Zhang it is argued that Zhang does not disclose exposing a soot layer that will become part of the cladding. This is largely irrelevant for the reasons pointed out above. Namely, whether or not something becomes a cladding is an intended use limitation that does not define over the Zhang structure.

Yokokawa is cited as showing that it is known to covert solid rods into cladding tubes (figures 5-6).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

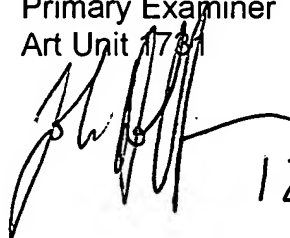
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John Hoffmann
Primary Examiner
Art Unit 1731



12-13-06

jmh